

A critical issue that seems to be poorly addressed in the NPRM is the definition of “Harmful Interference”. Without some specificity, ‘harmful’ can reflect levels of radiation either above or below any arbitrary datum. Assuming that a verified occurrence of ‘harmful interference’ can trump a successful deployment using the methodology of Appendix C, then there needs to be a verifiable definition of ‘harmful’. Without this, every instance of complaint will be subject to challenge. The following definition is likely to be the predominant one in any complaint: “The presence of the BPL signal is preventing me from successfully completing my objectives under Part (xx)”. In other words, “I was unable to communicate successfully with (XXX)”, or “the BPL signal masked the acquisition of radio spectra from (XXX)”. For Radio Astronomers, Amateurs and other experimental services, any signal above the noise floor has the potential to trigger such a complaint. Will the provider of the BPL system, accept this highly subjective complaint without challenge? For much of the activities in these services, the interference will difficult (if not impossible) to repeat, given the variability of propagation, weather, etc. Who will arbitrate these complaints and challenges? The BPL provider can prolong the discussion until it dies a natural death. On the other side of the issue, a licensee in one of the other services can inundate the BPL provider with spurious complaints.

The difficulty in establishing a definition of ‘harmful’ which uses the noise floor as a reference against which to define an absolute received signal level is that if the noise floor rises as BPL is deployed, the existing service loses ground over time.

There must, therefore, be a consensus definition of “harmful” which acknowledges both operational and objective parameters in a verifiable and non-ambiguous way. Without this, both the complainant and the responder will be bogged down in a sea of unresolved complaints.